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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,098	02/22/2005	Arend Hoek	TS1181US	1118

7590 11/12/2008
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EXAMINER

NGUYEN, CAM N

ART UNIT	PAPER NUMBER
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1793

MAIL DATE	DELIVERY MODE
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11/12/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/517,098	Applicant(s) HOEK ET AL.	
	Examiner Cam N. Nguyen	Art Unit 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07/23/08 (an election).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 9-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/07/04,04/23/08,07/23/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Election/Restrictions

1. Applicant's election without traverse of Group I, claims 1-8 & 14-17, in the reply filed on 07/23/08 is acknowledged.
2. Claims 9-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention(s), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07/23/08.

Specification

3. The abstract of the disclosure is objected to because it is not written in a single paragraph format. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claim 1 is objected to because of the following informalities:
 - A. In line 2, "therefore" should be changed to -thereof--.
 - B. In line 2, -- is -- should be inserted before "selected".

Appropriate correction is required.

Claim Rejections - 35 USC § 112 (Second Paragraph)

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claim 1 is closed to include a component selected from a group consisting of "ruthenium, iron, cobalt, and nickel" as a catalytically active component or precursor thereof, but claim 5 recites that the catalyst contains an element or compound selected from the group consisting of Group IIA, IIIB, ...and Group VIII of the Periodic Table of the Elements. This appears confusing and improper. Thus, renders the claim vague and indefinite.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 & 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frayer et al., hereinafter referred to as "Frayer '777", (US Pat. 4,133,777).

Frayer '777 discloses a hydrosulfurization catalyst comprising Group VI and Group VIII metals with a promoting amount of Group IV-B metal on a non-cracking support, etc., the particles of the catalyst comprising elongated extrudates which show in cross-section at least one groove defining protrusions and an average concavity index between 1.01 and 1.35, the shortest distance between the depth of said at least one groove and the center in said cross-section being between 1/30 and 1/20 inch (see col. 13, claim 1). The particles have a plurality of

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alternating longitudinal grooves and protrusions (see col. 13, claim 2). The non-cracking support is alumina (see col. 14, claim 9). The diameter of the catalyst particle is twice the shortest surface-to-central axis dimension (see col. 2, ln 60-62).

The difference between the claimed catalyst and that disclosed by Frayer '777, is that the disclosed catalyst has a diameter "twice" the diameter of the central axis instead of "between 0.74 to 1.3 times" that the claim requires. Frayer '777 also does not disclose the limitation on "the overlap of each alternating circle and the central circle being less than 5% of the area of the central circle", which requires in the instant claim 1.

However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have shaped the catalyst into the desired shapes, sizes, diameters, lengths, and dimensions, etc. in order to achieve the desired catalyst structure because they are results effective variables, in view of *In re Boesch*.

Claim Rejections - 35 USC § 102(b)

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 & 14-17 are rejected under 35 U.S.C. 102(b) as being anticipated by JP '445, (JP 55119445).

JP '445 discloses desulfurization catalysts comprising hydrogenation components on porous alumina which are made into columnar bodies, wherein 3-6 circles of the same diameter

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as that of the central circle are disposed around the circle of diameters about 0.4-5 mm in cross-section at an equal angle, the center-to-center distance of the central circle and circumferential circles is made about 1/4-3/4 of the diameter of the central circle, etc. (see Abstract).

The claimed shaped catalyst does not appear to patentably distinguish from the disclosed catalyst. Thus, the claims are anticipated by the teaching of the reference.

Citations

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. All references are cited for related art. See PTO-892 Form prepared.

Conclusion

9. Claims 1-17 are pending. Claims 1-8 & 14-17 are rejected. Claims 9-13 are withdrawn due to nonelected (distinct) invention(s). No claims are allowed.

Contacts

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner CAM N. NGUYEN, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Primary Examiner

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/C. N. N./

November 08, 2008